THE EXPLORATION OF MARTIAN CLIMATE, METEOROLOGY AND EVOLUTION OF ATMOSPHERE

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NASA's program of robotic exploration of Mars emphasizes the study of the origin and evolution of its atmosphere and its past and present climates. Research to be conducted by missions launched recently, as well as those now in development, includes remote sensing and in situ observations of weather, transport of volatiles, isotopic composition of the atmosphere, and the radiative balance of the polar regions. A sample of Martian atmosphere and surface will be brought to Earth in a mission to be launched in 2005. This paper describes the investigations comprising NASA's program for exploring the Martian environment and their relevance to comparative studies of planetary atmospheres.

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